

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460



United States
Environmental Protection
Agency

Office of Pesticide Programs

MEMORANDUM

5/3/2017

SUBJECT: Acute Toxicity Review for PERISIDE, EPA Reg. No.: 833-RU
DP D438362

FROM: Chemistry and Acute Toxicology Science Advisory Council (CATSAC)

Co-Chair: Karen P. Hicks

Reviewer: Chris Jiang

Chemistry and Toxicology Team
Product Science Branch
Antimicrobials Division (7510P)

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THRU: Jenny Tao, Senior Scientist
Chemistry and Toxicology Team
Product Science Branch
Antimicrobials Division (7510P)

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TO: Seiichi Murasaki PM Team 33 / Terria Northern
Regulatory Management Branch I
Antimicrobials Division (7510P)

Registrant: Alex C. Fergusson, LLC

Decision No.: 526000

Submission No.: 997445

MRID No(s): 50149904

Formulation from label			
PC code(s)	CAS #(s)	Active Ingredient(s)	% by weight
063201	79-21-0	Peroxyacetic acid	7.40
000595	7722-84-1	Hydrogen peroxide	23.00
		Inert Ingredients	69.60
		Total	100.00%

I. BACKGROUND: The registrant, Alex C. Fergusson LLC, has submitted an application for their new product, *Periside*, EPA Reg. No. 833-RU. The package includes a cover letter, a label, a Confidential Statement requirements of this integrated end-use product for non-food use, and a waiver request for all six acute toxicity studies, MRID 50149904.

II. FINDINGS:

1. In the waiver request (MRID 50149 904), the registrant states that the proposed product and hydrochloric acid contain equal molar hydronium ion concentration based on their same pH values. Based on this statement, the registrant further states that hydrochloric acid (HCl) can serve as an analog for a product with the same pH, such as the proposed product, *Periside*. Therefore, the acute toxicity data conducted for hydrochloric acid (HCl) can be bridged. However, such a statement is not valid because peroxyacetic acid and hydrogen peroxide will behave differently chemically.
2. The registrant also claims that the proposed product will not generate respirable particles because it generates a coarse spray; therefore, the registrant wishes for a waiver of the acute inhalation toxicity study requirement. Such a waiver rationale for acute inhalation toxicity is **unacceptable** because coarse sprays may generate respirable particles as well. Additionally, the actual particle size was not determined and provided in the waiver request document to support such a claim (MRID 50149904).
3. The acute oral and inhalation toxicity studies should not be conducted and a Toxicity Category I should be assigned for both endpoints, based on the chemical properties of the proposed product.
4. The waivers for eye irritation and dermal irritation studies are **acceptable** due to the corrosiveness of the proposed product. Toxicity Category I will be assigned for both primary eye irritation and primary dermal irritation endpoints.
5. The waiver for skin sensitization is **acceptable** due to the corrosiveness of the proposed product. The Reregistration Eligibility Decision (RED) for hydrogen peroxide and peroxyacetic acid states that both active ingredients are non-sensitizers.
6. The acute toxicity profile for EPA Reg. No. 833-RU is currently:

Toxicity Profile for 833-RU		
Guideline	Toxicity Category	Status
Acute Oral Toxicity	I	Waiver unacceptable Assigned Tox. Category I
Acute Dermal Toxicity	I	Waiver acceptable
Acute Inhalation Toxicity	I	Waiver unacceptable Assigned Tox. Category I
Eye Irritation	I	Waiver acceptable
Dermal Irritation	I	Waiver acceptable
Skin Sensitization	Non-sensitizer	Waiver acceptable

1. This product meets the Agency requirements for Restricted-Use Classification based on data that place it in toxicity category I for all routes of exposure. In lieu of assigning the product Restricted-Use classification, the product manager may consider alternatives such as a respirator, face shield or goggles (to mitigate the identified hazards), protective clothing, chemical-resistant gloves, and chemical-resistant footwear. Restricted-Use requirements vary depending upon use sites, e.g., institutional use, residential use, etc. Please refer to the 40 CFR §152.170 for information on Restricted-Use products.

2. Based upon data placing it in toxicity category I for primary eye irritation, this product meets the Agency requirements for Child-Resistant Packaging (CRP). However, the Agency does not require products that are assigned Restricted Use status to be placed in CRP in addition to Restricted-Use classification. CRP requirements vary d 157.24 upon use sites, e. exemptions, industrial use, residential use, etc. Please refer to the 40 CFR, §157.22 and 157.24 for CRP requirements and exemptions. Thus, CTT recommends that the Product Manager assign this product Restricted-Use classification; if not, the registrant should place the product in CRP.

3. The signal word is DANGER with SKULL and Crossbones.

4. The labelling must read: **Corrosive.** Causes irreversible eye damage and skin burns. Do not get in eyes, on skin, or on clothing. Wear coveralls worn over long-sleeved shirt and long pants, socks, chemical-resistant footwear, chemical-resistant gloves such as nitrile, viton, neoprene, and/or barrier laminate gloves, a respirator with an organic-vapor removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved or pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any N, R, P, or HE prefilter, and goggles, face shield, or safety glasses. Wash thoroughly with soap and water after handling and before eating, drinking, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

5. The first aid statements must read:

If in eyes:

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.
- Call a poison control center or doctor for treatment advice.

If on skin:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

If inhaled:

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.
- Call a poison control center or doctor for further treatment advice.

If swallowed:

- Call a poison control center or doctor immediately for treatment advice.
- Have a person sip a glass of water if able to swallow.
- Do not induce vomiting unless told by a poison control center or doctor.
- Do not give anything to an unconscious person.

6. Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.
7. Have the product container or label with you when calling a poison control center or doctor or going for treatment. For general information on product use, etc., call the National Pesticides Information Center at 1-800-858-7378. For emergencies, call the poison control center 1-800-222-1222.